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ABSTRACT

A discussion of cloze procedure and Directed Reading and Thinking Activity (DRTA) proposes that the complementary use of the two procedures helps develop student awareness of language-learning processes (metacognition) for improved language proficiency. The paper defines metacognition, cloze, and DRTA, describes their use in teaching, reviews relevant research, and explains methods of combining the techniques in the language classroom. This approach encourages (1) the development of cognitive strategies; (2) the development of good language-learning characteristics such as active participation, working through mistakes, group work, tolerance of uncertainty, attention to form and patterns, and seeking opportunities to practice; and (3) the ability to regulate learning. A list of references is included. (MSE)

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Metacognition: A Reachable/Teachable Goal

Thelma Borodkin

Paper presented at the Annual Meeting of the Conference on College Composition and Communication

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Metacognition: A reachable/ teachable goal

The cloze, widely used for testing language proficiency, seems to be valuable for teaching as well. The DRTA,* as a teaching technique, deals with concepts, integrating learners' prior knowledge with that of the text, while the cloze focuses on the more detailed aspects of language e.g. morphology, syntax and vocabulary.

The complementary use of these techniques seems to offer language learners the opportunity to improve their language proficiency. Simultaneously, many students seem to develop their metacognitive skills as well - becoming aware of and regulating their language learning.

It is common knowledge that the connection between skill and will in the language-learning process is an unknown, implying that if only learners wanted to become skilled in their new language, they would. Nevertheless, there are many students who do indeed want to learn their new language; their efforts seem to be thwarted by their lack of knowledge on how to do it. There is some optimism in the view, as will be reported below, that intervention techniques can be successfully introduced into the language-learning classroom to help learners learn how to learn.

This paper purports to show how an awareness of their language-learning process can be developed in students through the use of the cloze and the DRTA. The first part of this paper contains a definition of metacognition, the cloze and the DRTA, and includes a description of their use for teaching. The second part of the paper shows how metacognition can be developed through the complementary use of the cloze and the DRTA.

*Directed Reading and Thinking Activity

Metacognition

Metacognition is a complex of associated phenomenon related to knowledge about and the regulation of the domain of cognition (Wenden, 1982). It is considered by some writers to be that process that underlies the efficient use of strategies and the essence of intelligent activity (Brown,1978; Brown et al, 1982).

Today, meta prefixes are appended to psychological terms to indicate awareness of the cognitive process; researchers refer to this "higher" level of cognition as metacognition or metacomponents (Sternberg, 1979). In any case, the "thing" being characterized is the person's sensitivity to the variables and procedures that influence problem-solving behavior. Brown (1978) refers to these variables as processes of predicting, planning and proving.

Metacognition is made up of two parts; 1) what a person knows about his/her cognition and 2) the ability to control (monitor) these cognitions (in the sense of planning cognitive activities, choosing among alternative activities, monitoring the performance of activities and changing activities) (Forrest-Pressley and Gillies, 1983:334).

Thus, despite the fact that language learners at the college level are presumed to have mastered self-regulatory skills leading to successful learning, there is little evidence to support that view (Weinstein and Rogers, 1985).

As a matter of fact, most researchers deny this simple age correlation and indicate that metacognition development is a function of expertise, experience and sociocultural

milieu (Brown 1978,1982).

The cloze: a teaching technique

The cloze procedure was invented by Taylor in 1953 for determining the readability of texts. The cloze is a distortion of the word "close" and is based on the term used in Gestalt psychology to describe the tendency of human beings "to close" or complete an incomplete object which is part of their experience. This ability applies to a geometric form ( ) , a letter NASA , a word t_e or a sentence- The girl _____ the clothes.

The cloze is constructed by the deletion of every nth word in a passage of some 250-300 words. The task of the student is to fill each blank with one word. The word must be grammatically correct and semantically appropriate to both the sentence within which it appears as well as to the entire discourse. Moreover, the blanks must be of equal length, to preclude being used as clues and sequentially numbered, to facilitate whole-group/teacher examination.

While the cloze continues to be used to measure readability of texts, it is also used for testing language proficiency in English, French, Polish, German, Thai, Vietnamese, Greek, etc. It is also used for teaching reading comprehension in English and Hebrew.However, its most widespread use is in research on the testing of proficiency in English as a second language (ESL) (Oller, 1979).

The research reveals that the cloze is a useful measure

of language proficiency. Because each item must be grammatically correct and semantically appropriate to the entire text, it is a test of both discrete point and integrative skill. In addition, the cloze correlates well with other integrative tests of language proficiency, such as dictation, listening comprehension and essays. Each of these tests forces the students to use their grammar of expectancy (Oller, 1979) that is, their knowledge of the vocabulary, morphology and syntax of the language to score successfully. They are pragmatic tests in that the language learner is compelled to do what native speakers of a language regularly do -- they make meaning from the available data and intelligently guess what is expected.

The cloze may be viewed as a measure of what it may mean to know a language; using the cloze for teaching may increase the learner's proficiency in the language. Some researchers say that knowing a language means being able to both produce and understand a stream of speech (Fries, 1945). Others say that it means being able to supply items when they are missing (Spolsky, 1973). For still others, knowing a language means being able to predict missing items on the basis of existing data. While Oller (1979), as cited, refers to this ability as the grammar of expectancy, Smith (1975) calls it the grammar of predictability.

DRTA: A technique for teaching reading strategies

DRTA is the acronyn for Directed Reading and Thinking Activity (Stauffer, 1969). DRTA consists of three steps: predict, read and prove; it is a method whereby cognitive

developmental research converges with classroom teaching practices. Stauffer (1969) explains the connection between reading and thinking and shows how the direction of these processes can lead to readers' gaining more knowledge, either individually or in groups (pp. 35-128). The latter is being suggested here and is characterized by the fact that all the members of the group read at about the same level of competence and all read the same material at the same time. The research reveals that the DRTA not only encourages more student responses, but that the responses are of high quality and great variety. According to Stauffer, this is due to the fact that learners have set purposes for their reading while teacher questioning focuses on integration and inference, forcing students to prove whatever statements they make. Such proof also often requires learners to go beyond the literal level of the text, thus integrating their prior knowledge with that of the text (Cook and Mayer 1983:333).

Complementary use of the cloze and the DRTA: A brief description

Although the DRTA can be used for a paragraph-by-paragraph reading of a passage, the technique suggested here is that the teacher begin by writing the title of the cloze passage on the board. The class is then asked to predict the information that will be found in the text i.e. the cloze. One student, in the role of class secretary, writes students' predictions on the board. Having made their

predictions, the class is then divided into proficiently heterogeneous groups of three students each. The cloze passage is then distributed to the students who are instructed to read the entire passage individually first, a direction which students quickly learn to heed. After reading the entire passage to themselves, learners are encouraged to work together to discuss an appropriate choice for each of the blanks. The teacher moves from group to group pointing out clues, asking questions, giving hints, but not revealing answers. As the teacher moves about, she is able to observe individual performances as well as note shared areas of difficulty.

After the cloze has been completed, students resume the circle in which the class generally sits. Students take turns, each reading a completed sentence. At this time the critical part of the use of the cloze for teaching takes place. For, while the cloze has not generally proved to be a superior instrument for teaching reading comprehension, for example, those studies that do report its superiority include teacher-led discussions (Kingston and Weaver, 1970; Rye, 1982). These discussions are an integral part of the technique advocated here because it is at this time that students get feedback on the process of making and articulating their choices. Teachers also have an opportunity to clarify incomplete learnings and/or teach new ones e.g. explaining writing conventions, as will be described below. Finally, teacher and students together examine students' earlier predictions and judge whether they

are: implicit, explicit or unsupported.

The cloze and metacognition

Bialystok (1978), in describing her model of second language learning, writes of three sources of knowledge available to second language learners 1)Explicit Linguistic Knowledge 2) Implicit Linguistic Knowledge and 3) Other Knowledge. Use of the cloze, writes Bialystok (p. 81), provides the learner with an opportunity for all three types of inferencing to operate as students go about the task of restoring appropriate fillers to the deletions in the passage.

Citing the importance of the strategy of inferencing, Carton (1971:58) writes, "A language pedagogy that utilizes inferencing removes language study from the domain of mere skills to a domain that is more closely akin to the regions of complex intellectual processes." Carton designates three categories of cues available to language learners that determine the possibilities for making inferences. They are: intra-lingual cues supplied by the target language; inter-lingual cues denoting the relation of the language to the learner's language (or languages), and extra-lingual cues, the content of messages, or linguistic material, under consideration.

In the use of the cloze, says Carton, those cues are available to learners who utilize the process of inferencing to make intelligent guesses about the missing items (p.46). Finally, inferencing is appropriate to a language pedagogy

which views language learning as a problem-solving process, combining inaccuracies and doubtfulness and which departs from a more static memory-mimicking system.

Findings

The addition of the DRTA to the cloze for teaching appears to encourage the development of students' cognitive strategies, characteristics of good language learners as well as metacognitive skills; these three results of the cloze plus the DRTA for teaching will be explained below.

1. The use of the cloze plus DRTA encourages the development of cognitive strategies.

The use of the cloze for teaching ESL reveals that the relentless demand on learners to fill the blank with an appropriate word forces students to pay attention to any and all the clues in the immediate environment of the blank and beyond to make intelligent guesses. Inferencing for making intelligent guesses is a cognitive strategy integral to the use of the cloze for language teaching. For example, when low-intermediate ESL students were asked to anonymously indicate the questions they ask themselves when doing the cloze, they wrote:

> 1. "The way I figure out what belongs in the blank spaces was by reading a couple of sentences and then I put in the right or sound good word."
>
> 2. "When I decide what word I have to use I read the word before and the word after and I think which word is going to be the best."

Moreover, this continuous demand to fill the blank appropriately seems to exploit students' knowledge of the world, helps them be more aware of the importance of writing

conventions as a means of facilitating communication e.g. punctuation, and encourages them to make choices that make sense. They attend to relationships, social situations and rhetorical devices. For example, one student wrote: "No introduction, no body, no conclusion." This comment enabled the teacher to point out different forms of organizing a text in an expository and a narrative passage.

In addition, both the cloze and the DRTA appear to force learners to do what good readers apparently do. Good readers are those who are able to integrate not only their knowledge of the world with that of the text, but good readers are the ones who are continuously involved in predicting new information on the basis of that which is already available (Block, 1986). Furthermore, Carrell (1983), writing of the differences between nonnative and native readers, points out that although high-intermediate and advanced ESL readers may be processing the literal language of the text, they are not making the necessary connections between the text and the appropriate background information. The DRTA, as a focus-enhancing (Oxford, 1985) technique, seems to be one possible way to help nonnative readers integrate appropriate background knowledge with that of the texts. In addition, the use of the DRTA forces readers to discard unsupported assumptions in favor of those actually found in the text, thus helping learners develop more flexible reading strategies.

Furthermore, in the group discussion of the fillers for

the blanks and the examination of the predictions, learners together verify and clarify their choices by talking and thinking aloud, cognitive strategies (Oller, 1979) recommended by Block (1986), Raimes (1985), Stauffer (1980), Rye (1982) and others.

While practice is reported almost universally as being the leading language-learning strategy, relatively little is known about how much in fact students do practice or what kind of practicing they do. However, the use of the cloze for teaching ESL gives students practice in reading and re-reading the passage, a not-to-be-undermined learning strategy (Oller, 1979). Similarly, the complementary use of these techniques seems to give students the kind of practice that Yorio (1987) recommends. Students are learning to examine the text carefully, to pay attention to form and meaning, and to discuss metalinguistic issues in a way that closely resembles that which linguistis regularly do. In this manner, says Yorio, learning (focussing on formal grammar) and acquisition (meaningful discussions) can come together to help learners become more accurate as well as more fluent communicators. Learners are thus being encouraged to learn to become good Monitors. It is precisely this kind of non-intrusive practice that Bialystok (1978) also refers to as necessary for second language learners.

In addition, working in groups seems to be a highly recommended procedure in ESL classrooms. Long and Porter (1985) report on the nature of non-native/non-native

conversation; they indicate that the results are equal to those of exchanges between native speakers and non-native speakers. While they indicate the need for caution in the selection of appropriate tasks for group work, the use of groups for doing the DRTA and the cloze seems beneficial. There is a constant lively discussion in progress as learners collaborate with each other in the performance of the techniques recommended here. A confirming comment came from a student who indicated how important those group discussions and teacher clarifications were for her. She said that she was sure that others were similarly shy about asking for clarification and welcomed the detailed explanations often occurring in class, initiated by students.

Finally, says Rubin (1975), the learner strategies will vary with the task, the learning stage, the age of the learner, the context, individual styles and cultural differences in cognitive styles. Use of a variety of cloze passages may encourage students to develop a varietyof learning strategies, as well as make it possible to cater to individual learning styles. For example, when given a cloze based on one of their core courses, Origins of the Modern Age, students clearly understood that they were no longer learning language. They expressed the view that that was a wonderful way to learn history.

2. Use of the cloze and DRTA encourages students to develop good language-learning characteristics.

"Inefficient learners," says Wenden (1985), "are inactive learners." From the initial to the final stages of the use of the cloze and the DRTA for teaching, learners are actively involved. Moreover, the use of the cloze in groups, as suggested here, enables inhibited learners to participate, for everyone must be actively involved in completing the blanks. Making mistakes is also an accepted part of doing the cloze or making the predictions, possibly diminishing the fear of risk taking.

Furthermore, working in groups has affective as well as cognitive effects. The students appear to gain respect for themselves and each other as "knowers"; they also appear to become more independent as they rely on themselves as sources of information in "solving the puzzle." Moreover, while discussing their choices, many students seem to become more confident of their ability to use their new language meaningfully, and many students become more proficient in their new language as they use it to discuss substantive linguistic issues.

In addition, the use of the cloze and DRTA seems to strengthen learners' ability to tolerate uncertainty, another characteristic of good language learners (Rubin, 1975). At the end, during the proving stage, there is a group discussion of explicit and implied information as students verify those predictions actually found in the passage and clarify that which has been implied. Thus they need to wait until the final group discussions to evaluate their choices.

In addition, good language learners are those who pay attention to form, look for language patterns, analyze, categorize and synthesize (Rubin, 1975). Use of the cloze and the DRTA seems to encourage the development of these characteristics in language learners.

For example, learners write:[1]

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1 Students were asked to anonymously write comments/ questions while using these techniques.

"Which word goes with this verb?"

"I like doing this because I have to use my imagination and my intelligence."

Finally, good language learners not only practice but seek out opportunities for practice. For example, while Carroll (1966:104) suggests that students learn that which is most meaningful, Rubin asserts that good language learners probably find ways to make that which must be memorized more meaningful. Thus, the use of the cloze plus DRTA, which demands relentless attention to the many linguistic and other clues in the text, may be instrumental in helping develop in students those traits which the research reports as characteristic of good language learners (Naiman et al, 1978; Rubin, 1975).

3. Use of the cloze and DRTA encourages students' ability to regulate their learning.

Besides the learning of the cognitive strategies already mentioned, using the cloze and the DRTA seems to

encourage monitoring, a metacognitive strategy, which should be non-intrusive, says Bialystok (1978). Some researchers believe that excessive attention to form interferes with production (Krashen, 1980). Bialystok argues that in the use of the cloze such monitoring is a positive regular feature; moreover, students' view of the cloze as a "puzzle" seems to heighten their interest in making sure that they have chosen appropriate fillers for the blanks. Working in groups and together predicting the information to be found in the cloze passage, enable learners to discuss and thereby monitor (regulate) their choices as well as the work of others. This collaborative monitoring helps many students understand the discarding of inappropriate choices for more productive ones.

From start to finish in the use of the cloze and the DRTA, learners are encouraged to regulate their learning in the sense that many students become accustomed to searching for clues in the text to fill the blanks and to corroborate their predictions. They make assumptions and modify them on the basis of new information; as active listeners, they monitor others' language-learning efforts as well. Finally, they form the habit of examining and evaluating their work; when asked to anonymously comment on questions they ask themselves, many students reported that they feel they are learning:

"This is a good way to learn grammar and vocabulary," wrote some students.

"I think this is a very good exercise because it makes

us think in a reasonable way," wrote another.

"What do I have to do first?" wrote still another.

Discussion

In the use of the cloze and the DRTA for teaching, many students seem to be able to learn metacognitive skills in addition to improving their proficiency in their new language. Yorio (ms.) writes that acquisition and learning are not incompatible; neither should they be viewed as opposing forces. Students need to learn the forms by which the language makes meaning. Similarly, they need an opportunity to practice what they have learned; some call this a process of internalization, while Bialystok (1978) refers to this kind of language acquisition as movement from the Explicit Linguistic Knowledge to the Implicit Linguistic Knowledge, while simultaneously including Other Knowledge. As cited above, it is Bialystok's view that the use of the cloze encourages the use of all three sources of knowledge. Similiarly, the use of the DRTA enables students to use the Language Experience Approach to learning, recommended by Stauffer (1980) and others.

Studies on intervention research are beginning to appear; the results look promising (cf. Brown, 1978; Meichenbaum and Asarnow, 1979; Forrest-Pressley and Gillies, 1983; Wenden, 1982; Horwitz, 1986; O'Malley and Chamot, 1985; and Carrell, 1985).

The use of the cloze and the DRTA seems to offer a

first step in helping average learners become better at what they are trying hard to do. As Yorio writes, "These learners must learn to look at form in addition to meaning, they must learn to become aware of specific problems, and theymust learn to monitor their output."

Beyond learning to become better language learners, such instruction may prove useful to students in other areas of their lives as well.

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